# Howard County Strategic Pandemic Influenza Plan (draft) February 2007

**Version 1** 

#### **ACKNOWLEDGEMENTS**

The Howard County Pandemic Influenza Plan, version 1 was developed in consultation with the Maryland Department of Health and Mental Hygiene, county agencies and departments and representatives from private and volunteer organizations.

This Plan was adapted directly from The Maryland Pandemic Influenza Plan, Version 6, written by the:

Pandemic Influenza Program
Office of Preparedness and Response
Office of the Deputy Secretary of Public Health
Maryland Department of Health and Mental Hygiene

Adaptations of the Maryland Pandemic Influenza Plan for use in Howard County and future updates to the Howard County Pandemic Influenza Plan are the responsibility of the:

Emergency Preparedness Program
Office of Health Policy and Planning
Howard County Health Department

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Community Emergency Response Network (CERN)	

Medical Reserve Corps (MRC).

Faith-based and Community-based Organizations
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# 5. Planning Checklists **PREFACE**

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This document is adapted directly from the Maryland Pandemic Influenza Plan (M-PIP), Version 6 released in July 2006. The MPIP incorporates new guidance from the United States Federal Government and the World Health Organization. In particular, MPIP is based on the following documents:

- U.S. National Strategy for Pandemic Influenza
- Pandemic Influenza Implementation Plan for the National Strategy
- Health and Human Services Pandemic Influenza Plan
- National Incident Management System
- National Response Plan

This document reflects an adaptation of the M-PIP to address the specific response needs within Howard County. As with the state plan, the Howard County Pandemic Influenza Plan (H-PIP) is a living document; it will be updated as appropriate to reflect changes in the threat of pandemic influenza and the state of relevant response capabilities and technologies within Howard County.

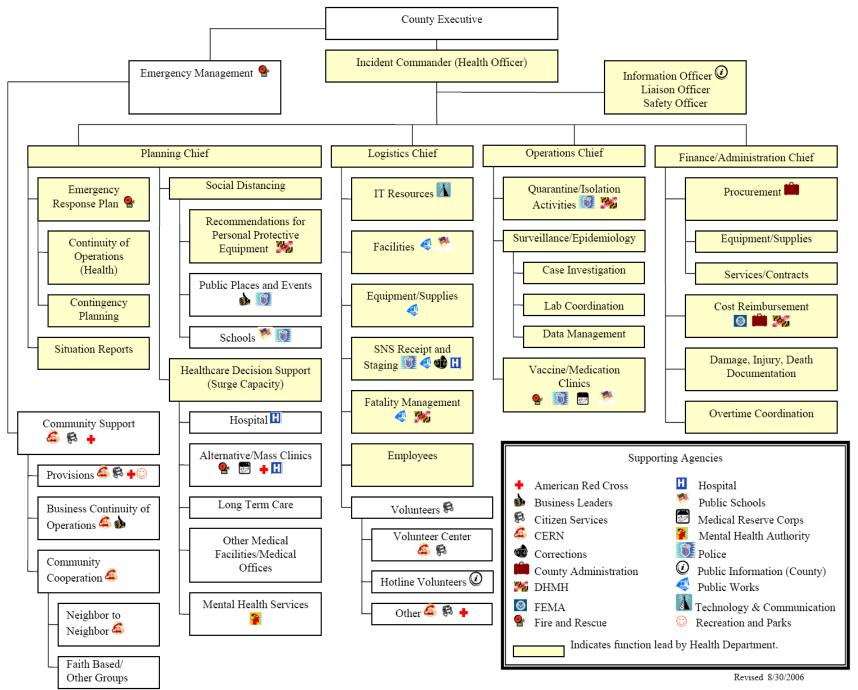
This plan represents the Howard County strategy for both pre-pandemic planning and pandemic response. This plan is meant to be used as an annex to the Howard County Health Department (HCHD) Emergency Operations Plan and in conjunction with both the strategic plan outlined in the M-PIP as well as the operational plan that outlines specific activities to be undertaken by the state and local health department based on pandemic phase. Both the H-PIP and M-PIP are written in accordance with the National Response Plan (NRP) and the National Incident Management System (NIMS). The H-PIP coordinates specifically with Emergency Support Function (ESF) 8, Health and Medical Services.

The H-PIP describes the county's purpose, goals, objectives, and planning assumptions. It also defines the threat of pandemic influenza and the revised World Health Organization (WHO) pandemic phases. It lists the roles and responsibilities of county departments and agencies, as well as non-government partners, and charges these organizations with planning their departmental Operational Plans. During a pandemic, these roles and responsibilities are executed within the framework of the NIMS compliant incident command structure illustrated in figure 1 below. Operational plans outlined in the M-PIP describes the actions necessary for HCHD and other local health departments to prepare and respond to a pandemic. Sensitive information will be incorporated in those versions for official use only but will not be disclosed to the public due to safety and security precautions.

An influenza pandemic will require a "pan-societal" response. All levels of government and all segments of society must be actively engaged and fully involved for an effective response. Ultimately, however, the actions of an individual and the collective response

of individuals will be key to mitigating the health, social, and economic effects of a pandemic.

Figure 1. PANDEMIC INFLUENZA INCIDENT COMMAND STRUCTURE, ESF-8
Howard County Health Department, Howard County, Maryland



#### 1. Introduction

This section of the Howard County Pandemic Influenza Plan outlines the goals and strategies that county government and other key stakeholders should take to mitigate the threat of an influenza pandemic. This Plan reflects the guidance of the United States Federal government, the recommendations of the World Health Organization, and material directly from the Maryland Pandemic Influenza Plan published by the Maryland Department of Health and Mental Hygiene. This guidance is subject to change as a result of the evolution of the threat of a pandemic and changes in the state of relevant response capabilities and technologies. Also, as the public health community continues to study the effectiveness of control measures in countries experiencing influenza infection in birds, animals, and humans, this data will enhance this strategic plan.

#### 2. The Threat of Pandemic Influenza

Avian Influenza: There are multiple avian influenza, or bird flu, viruses that occur naturally among wild birds. Such viruses circulate primarily in birds, both wild and domestic. Wild birds generally do not become sick, but domestic birds are very susceptible to illness and death from avian influenza. Some avian influenza viruses can infect other animals and humans. Human populations have virtually no protective immunity against avian influenza. In the event that an influenza virus that is novel to humans spreads from person to person and causes serious illness, a pandemic, or worldwide outbreak of disease, can ensue. Three such pandemics occurred in the 20th century and globally killed an estimated 40 million in 1918, 2 million in 1957 and 1 million people in 1968. Two of these viruses continue to circulate and contribute to the majority of influenza cases annually. In fact, the U.S. National Strategy for Pandemic Influenza, November 2005, estimates that:

"the U.S. faces a burden of influenza that results in approximately 36,000 deaths and more than 200,000 hospitalizations each year. In addition to this human toll, influenza is annually responsible for a total cost of over \$10 billion in the U.S." *National Strategy for Pandemic Influenza, Homeland Security Council, November 2005, page 1.* 

The Current Threat: The current threat of a pandemic stems from an unprecedented outbreak of influenza in birds caused by a highly pathogenic avian influenza type A (H5N1) virus that has spread across birds populating Asia, Africa, and Europe. The virus has shown the ability to infect multiple species, including birds, pigs, cats, and humans. As of October 2006, H5N1 has infected 256 humans, 152 (59%) of whom have died. These human cases have come from 10 countries. (Source: World Health Organization Latest Information, <a href="http://www.who.int/csr/disease/avian\_influenza/en/index.html">http://www.who.int/csr/disease/avian\_influenza/en/index.html</a>). Most of these human cases are attributed to exposure to infected poultry or contaminated surfaces. Examples include virus transmission during the trade or smuggling of, working or playing with, or consumption of improperly-cooked infected poultry. Illegal trade of poultry and poultry products and the prevalence of backyard farms have hampered mitigation efforts. The H5N1 avian influenza virus would cause a pandemic if it adapts to spread easily from person to person. Already, there are some

indications of human-to-human transmission among close contacts (see New England Journal of Medicine 353;13, WWW.NEJM.ORG, September 29, 2005, *Avian Influenza A (H5N1) Infection in Humans*, page 1375). For example, in Thailand in 2004, a child transmitted H5N1 to her mother and aunt. In May 2006, six of seven family members infected with H5N1 in Indonesia died following contact with an eighth family member (who died and was buried without being tested for avian influenza). Although research continues in the Indonesia cases, a two generation, or person to person to person, transmission is suspected (CIDRAP, 5/24/06,

www.cidrap.umn.edu/cidrap/content/influenza/avianflu/news/may2406cluster.html ).

Also of concern is the failure of culling (i.e. depopulation of birds) to slow the spread of H5N1. Migratory birds continue to import the virus into new countries and over longer distances faster than expected. The virus has moved west all the way to France and east through Russia. It is impossible to predict whether H5N1 will lead to a pandemic. However, history suggests that if it does not, another novel influenza virus will emerge and threaten an unprotected human population.

Features of a Pandemic: An influenza pandemic is unlike any public health emergency or natural disaster. A pandemic will be widespread, with outbreaks expected to occur simultaneously throughout the U.S., thereby preventing the shifting of resources. A pandemic not only causes people throughout the world to become sick and possibly die, but also could cripple countries' economies as millions of people are unable or refuse to go to work. Governments, militaries, and industries could suffer high absenteeism (up to 40%) and productivity could slow to a crawl. The public health and healthcare systems could be overwhelmed by both the ill and the worried well. Furthermore, disruptions are expected to occur for 6 to 8 weeks at a time in two or three "waves" over an estimated 18 month period.

In the U.S., a pandemic could cause 20 to 45 million people to become ill, resulting in 100 to 200 thousand deaths. Between 300 and 700 thousand people could be hospitalized and over 20 million people would seek outpatient care. Costs could total over \$100 billion.

The following chart shows the estimated health impact on Maryland and Howard County of both a moderate and a severe influenza pandemic. Based on historical data, about 30% of the population will become sick, half of who will seek outpatient care for their illness. The number of hospitalizations and deaths will vary depending on the virulence of the pandemic virus.

# Impact of a Moderate and Severe Influenza Pandemic\* in Maryland (MD) and Howard County (HC)

Characteristic	Moderate (1957-like)	Severe (1918-like)
Illness	MD - 1,667,400 (30%) <i>HC - 80,035</i>	MD - 1,667,400 (30%) <i>HC - 80,035</i>
Outpatient Care	MD - 833,700 <i>HC - 40,018</i>	MD - 833,700 <i>HC - 40,018</i>
Hospitalization	MD - 16,000 <i>HC - 76</i> 8	MD - 183,400 <i>HC - 8,80</i> 3
Death	MD - 3,900 <i>HC - 187</i>	MD - 35,300 <i>HC - 1694</i>

<sup>\*</sup> Estimates based on extrapolations from past pandemics in the United States. Note that these estimates do not include the potential impact of interventions not available during the 20<sup>th</sup> century pandemics.

#### 3. Planning for Pandemic Influenza

**Purpose:** This Plan was designed to supplement the existing all-hazards Emergency Operations Plan with goals, objectives and actions for Howard County agencies and community partners in order to ensure a coordinated response in the event of pandemic influenza.

**Goals:** Howard County's Strategic Goals correspond to those within the Maryland Pandemic Influenza Plan and those of the *U.S. National Strategy for Pandemic Influenza, November 2005*:

- Stopping, slowing or otherwise limiting the spread of a pandemic in the County;
- Limiting the spread of a pandemic, and mitigating disease, suffering and death;
- Sustaining infrastructure and mitigating impact to the economy and the functioning of Howard County society.

**Objectives:** The County will achieve these goals through the following objectives from the guidance to *State and Localities* in the *U.S. National Strategy for Pandemic Influenza*, *November 2005*:

- Ensure that all reasonable measures are taken to limit the spread of an outbreak within the county's borders;
- Establish comprehensive and credible preparedness and response plans that are exercised on a regular basis;

- Integrate non-health entities in planning for a pandemic, including law enforcement, utilities, political leadership, businesses, schools, and others;
- Establish local stockpiles of supplies and a distribution system to support a pandemic response;
- Identify key spokespersons and ensure a coordinated crisis communications plan;
- Provide public education campaigns on pandemic influenza preparedness and response at the individual, community level within the government and private sector.

**WHO Pandemic Phases:** The World Health Organization has revised the pandemic phases as a result of the continued evolution of the avian influenza (H5N1) virus and advances in technology and biology. The table below illustrates the phase names, criteria for each phase and overarching public health goals for phase-specific response.

NEW PHASES	OVERARCHING PUBLIC HEALTH GOALS	
Interpandemic period  Phase 1. No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk* of human infection or disease is considered to be low.	Strengthen influenza pandemic preparedness at the global, regional, national and subnational levels.	
<b>Phase 2.</b> No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk <sup>a</sup> of human disease.	Minimize the risk of transmission to humans; detect and report such transmission rapidly if it occurs.	
Pandemic alert period  Phase 3. Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact. <sup>b</sup>	Ensure rapid characterization of the new virus subtype and early detection, notification and response to additional cases.	
<b>Phase 4.</b> Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans. <sup>b</sup>	Contain the new virus within limited foci or delay spread to gain time to implement preparedness measures, including vaccine development.	
<b>Phase 5.</b> Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).	Maximize efforts to contain or delay spread, to possibly avert a pandemic, and to gain time to implement pandemic response measures.	
Pandemic period  Phase 6. Pandemic: increased and sustained transmission in general population. <sup>b</sup>	Minimize the impact of the pandemic.	

The distinction between phase 1 and phase 2 is based on the risk of human infection or disease resulting from circulating strains in animals. The distinction is based on various factors and their relative importance according to current scientific knowledge. Factors may include pathogenicity in animals and humans, occurrence in domesticated animals and livestock or only in wildlife, whether the virus is enzootic or epizootic, geographically localized or widespread, and/or other scientific parameters.

**Planning Assumptions:** The Howard County Pandemic Influenza Plan is based on the following assumptions from the *U.S. National Strategy for Pandemic Influenza Implementation Plan, May 2006*:

<sup>&</sup>lt;sup>b</sup> The distinction between **phase 3**, **phase 4** and **phase 5** is based on an assessment of the risk of a pandemic. Various factors and their relative importance according to current scientific knowledge may be considered. Factors may include rate of transmission, geographical location and spread, severity of illness, presence of genes from human strains (if derived from an animal strain), and/or other scientific parameters.

- Susceptibility to the pandemic influenza virus will be universal.
- Efficient and sustained person-to-person transmission signals an imminent pandemic.
- The clinical disease attack rate will be 30 percent in the overall population during the pandemic. Illness rates will be highest among school-aged children (about 40 percent) and decline with age. Among working adults, an average of 20 percent will become ill during a community outbreak.
- Some persons will become infected but not develop clinically significant symptoms. Asymptomatic or minimally symptomatic individuals can transmit infection and develop immunity to subsequent infection.
- While the number of patients seeking medical care cannot be predicted with certainty, in previous pandemics about half of those who became ill sought care.
   With the availability of effective antiviral medications for treatment, this proportion may be higher in the next pandemic.
- Rates of serious illness, hospitalization, and deaths will depend on the virulence
  of the pandemic virus and differ by an order of magnitude between more and less
  severe scenarios. Risk groups for severe and fatal infection cannot be predicted
  with certainty but are likely to include infants, the elderly, pregnant women, and
  persons with chronic or immunosuppressive medical conditions.
- Rates of absenteeism will depend on the severity of the pandemic. In a severe pandemic, absenteeism attributable to illness, the need to care for ill family members, and fear of infection may reach 40 percent during the peak weeks of a community outbreak, with lower rates of absenteeism during the weeks before and after the peak. Certain public health measures (closing schools, quarantining household contacts of infected individuals, "snow days") are likely to increase rates of absenteeism.
- The typical incubation period (interval between infection and onset of symptoms) for influenza is approximately 2 days.
- Persons who become ill may shed virus and can transmit infection for one-half to
  one day before the onset of illness. Viral shedding and the risk of transmission
  will be greatest during the first 2 days of illness. Children will play a major role in
  transmission of infection as their illness rates are likely to be higher, they shed
  more virus over a longer period of time, and they control their secretions less
  well.
- On average, infected persons will transmit infection to approximately two other people.
- Epidemics will last 6 to 8 weeks in affected communities.
- Multiple waves (periods during which community outbreaks occur across the country) of illness are likely to occur with each wave lasting 2 to 3 months.
   Historically, the largest waves have occurred in the fall and winter, but the seasonality of a pandemic cannot be predicted with certainty.

#### 4. Roles and Responsibilities

Global pandemic preparedness and response efforts are coordinated by the

World Health Organization. Domestic response activities will be carried out under the broad all-hazards blueprint for a coordinated federal, state, and local response laid out in the National Response Plan (NRP) and the National Incident Management System (NIMS) by the U.S. Department of Homeland Security. Responsibilities for specified activities (e.g., transportation, energy, public works, etc.) are set out in 15 Emergency Support Functions (ESF). When the NRP is activated, the U.S. Secretary of Homeland Security serves as the overall lead for a coordinated federal response, while the U.S. Secretary of Health and Human Services serves as the lead for ESF #8, Public Health and Medical Services.

While public health and medical activities may comprise a significant portion of the response to a pandemic, other ESF authorities may likely be involved to sustain infrastructure affected by absenteeism or supply chain disruptions. (In a pandemic, ESF 8 has relevance to the following branches: response, human needs, intelligence, services and support, recovery, and logistics.) Disaster assistance is triggered by Presidential emergency or disaster declarations under the Stafford Act, including the provision of emergency funds and supplies to stricken households as well as aid in clearing and rebuilding damaged infrastructure.

In Maryland, the Health Emergency Powers Act provides the Governor with the legal authority to address a catastrophic health emergency, including pandemic influenza. (See Legal Authorities, section 2.2.) During a pandemic influenza response, Maryland agencies and departments will operate under the National Incident Management System (NIMS). The standard structure, functions, and common language of NIMS enhance the state's ability to respond efficiently and cooperatively.

NIMS recommends that local (county level) Incident Command Posts operate under Unified Area Command during a public health emergency like pandemic influenza that:

- Is large-scale, non-site specific, and geographically dispersed;
- Would evolve and continue over a long period of time;
- Would also be multi-jurisdictional and multi-agency, requiring coordination among several government organizations.

Unified area command allows each jurisdiction to have representation in the command structure in order to manage a very large incident. The unified command cell includes two or more agencies, such as Fire, Law Enforcement, Public Health and Emergency Management.

#### **INCIDENT MANAGEMENT AND COMMAND**

#### Statewide Response

During an influenza pandemic, DHMH will act as the overall lead agency for ESF 8 Health and Medical Services. In this capacity, DHMH will coordinate and lead state agencies in the overall response effort. DHMH will provide overall health and medical

leadership capability in conjunction with the Office of the Governor, the Adjutant General and the SEOC. DHMH will coordinate the provision of emergency response (e.g., pre-hospital, hospital, and other) at the state level during a pandemic while addressing the public health ramifications associated with the pandemic including the restoration of public health functions, defining the epidemiology of the pandemic, the administration of vaccinations and antiviral agents, among other public health issues.

State-level response activities will be coordinated through the State Emergency Operations Center (SEOC) operated by the Maryland Emergency Management Agency (MEMA). The Director of MEMA will activate the SEOC for Pandemic Influenza response based on the recommendation of the Governor or the Secretary of the Department of Health and Mental Hygiene. The SEOC will operate under the National Incident Management System (NIMS) in conjunction with the National Response Plan. Principals or representatives from State (and maybe Federal) departments and agencies will report to the SEOC to liaison with each other and their respective departments. The SEOC has several roles, including:

- Coordinate regional, state, and federal resources, aid, and response;
- · Coordinate public information;
- Liaison with state elected officials and local EOCs and agencies.

#### **Local Howard County Response**

In Howard County, the Howard County Health Department has been designated as the lead agency and the Health Officer as the incident commander in order to improve efficiency and decision-making during an influenza pandemic. However, for other types of incidents, different lead agencies and incident commanders are designated based on the type of incident as outlined in the Howard County Emergency Operations Plan. HCHD will address the same public health issues at the county level that DHMH will be addressing statewide. In addition, HCHD will direct the local medical and social response to the pandemic by:

- Accepting and distributing Strategic National Stockpile (SNS) and other stockpiles, medications and vaccines locally and administering vaccines and medications to the populace through mass vaccination and antiviral clinics
- Coordinating the use of limited medical care resources, including expansion of medical care surge capacity, at the local level in cooperation with local medical care providers, Howard County General Hospital, and others.
- Conducting disease surveillance and epidemiology activities within the county.
- Making isolation and quarantine (I & Q) recommendations and issuing I & Q orders enforced by local law enforcement during the early stages of the pandemic.
- Working with local partners who will assume the bulk of responsibility for nonmedical community support during and after the pandemic.

During an influenza pandemic, local response is coordinated through the local Emergency Operations Center (EOC) operated by the Howard County Office of Emergency Management, as directed by ESF 5. The EOC acts much as the State EOC, but they also provide central locations where local government can provide interagency coordination and decision-making for managing the overall response. The local EOC may also function as a multi-agency coordination entity (MCE) — especially since a pandemic would cross-disciplinary and jurisdictional boundaries and would require a complex response. As an MCE, a local EOC would fulfill the following functions:

- Ensure that Incident Command Posts are providing accurate and timely situation and resource status information;
- Establish priorities between incident and area commands;
- Acquire or allocate resources in accordance with the priorities;
- · Anticipate and identify future resource needs;
- · Coordinate and resolve policy issues; and
- Provide strategic coordination.

#### **CONTINUITY OF OPERATIONS**

Each county agency and department, as well as private organizations should prepare an operational plan for preparing for and responding to an influenza pandemic. In the case of local government and response partners, such as the Health Department, Howard County General Hospital (HCGH), Howard County Public School System (HCPSS), and others, the plan should be written in compliance with NIMS and satisfying the requirements of the Emergency Support Function (ESF) that is applicable to their organization. In addition, each county agency and department, as well as private organizations should develop a continuity of operations plan (COOP) with procedures for maintaining and staffing essential services during an influenza pandemic. The following list provides important considerations when writing a COOP.

- Develop or update reliable emergency communication plans to reach personnel outside of work by multiple means if possible. This plan should include identification of key contacts, chain of communications, and processes for tracking and communicating personnel and operations status.
- Identify alternate locations and means of transportation and distribution for sustaining operations.
- Identify resources that can be used by other departments or agencies.
- Update or complete Memorandums of Understanding or Agreement for facilities, resources, or support during an emergency.
- Ensure personnel are cross-trained in essential staff and executive leadership positions.
- Identify legal policies that govern the organization, especially during an emergency.
- Establish and exercise the incident command structure.
- Develop procedures to suspend non-essential services and inform the public.

- Identify additional security measures required during an influenza pandemic, if any.
- Ensure that the organization documents expenditures and losses during emergencies using federal and state forms.
- Coordinate emergency plans and procedures with other state organizations if necessary.
- Identify reporting requirements during emergencies.
- Identify special clearances, credentials or identification required of volunteers, temporary staff or personnel detailed from other state agencies and departments.
- Encourage and track annual flu vaccination for employees and encourage personnel identified in high-risk groups to receive pneumococcal vaccine.
- Implement guidelines to modify frequency and type of face-to-face contact (e.g. hand-shaking, seating in meetings, office layout, shared workstations).
- Provide sufficient and accessible infection control supplies in all locations.
- Enhance interoperable communications and information technology infrastructure as needed to support employee telecommuting.
- Expand on-line and self-service options for employees, customers, and business partners.
- Review and revise, if necessary, sick leave policies so that during emergency circumstances such as during a pandemic, employees are not penalized for taking more sick leave days than they have earned.
- Establish policies for flexible worksite (e.g. telecommuting) and flexible work hours (e.g. staggered shifts) for use during a pandemic.
- Develop recovery plans and procedures for downgrading emergency response and returning to normal operations.

#### **ROLES AND RESPONSIBILITIES OF COUNTY AGENCIES AND DEPARTMENTS**

Roles and responsibilities of county departments and agencies are listed in this section as well as visually represented in figure 1. Note that the incident command structure illustrated in figure 1 is based on NIMS guidance. Following this section are roles and responsibilities of non-government organizations including faith-based and community-based organizations, healthcare facilities, private-sector organizations, and businesses.

- Howard County Health Department
- Howard County Office of Emergency Management
- Howard County Department of Fire and Rescue
- Howard County Police Department
- Howard County Department of Citizen Services
- Howard County Department of Public Works
- Howard County Public School System
- Howard County Department of Corrections
- Howard County Administration
- Howard County Office of Public Information
- Howard County Department of Technology and Communication Services
- Howard County Department of Recreation and Parks

Howard County Mental Health Authority

#### **Howard County Health Department shall:**

- Act as overall ESF 8 (health and medical services) lead agency at the county level.
- Coordinate and lead county agencies in response capacities.
- Assure and provide overall health and medical leadership capability in conjunction with DHMH and other response partners.
- Provide technical guidance to hospitals, businesses, schools, long-term care facilities, clinics, providers, pharmacies and others.
- Develop, maintain, exercise, improve and activate plans and procedures for: disease surveillance, control and prevention, including protocols for quarantine and isolation, and mass vaccination.
- Enhance disease surveillance to ensure early detection of the first cases of pandemic influenza in the county; conduct enhanced surveillance activities and monitoring for human cases.
- Foster coordination and participation among private and public sector partners in planning and response process.
- Establish and maintain a Health and Medical Resource Group that consists of local medical providers (Howard County General Hospital, Office of Emergency Management, large medical practices, local Federally Qualified Health Center, Medical Reserve Corps) who advise the Health Officer on topics related to pandemic response in the medical care setting, including, but not limited to:
  - Medical surge capacity;
  - Planning and activation of alternate health care facilities;
  - Use of personal protective equipment in the health care setting;
- Distribute and administer public stocks of antiviral drugs and vaccines
- Provide local physicians and hospital administrators with updated guidance on clinical management and infection control as the situation unfolds.
- Mitigate disease transmission using a range of containment strategies.
- Provide ongoing communication with the public (about the response effort, including the purpose and duration of containment measures).
- Facilitate provision of psychological and social support services to emergency field workers and other responders.
- Assess local response capabilities and identify measures for resolving any gaps.
- Review protocols for securing needed healthcare services, alternate care sites, and supplies both through and independently of the federal/state government during a public health emergency.
- Examine current legal authorities at the local level and recommend revisions if required.
- Ensure that local elected officials as well as county agencies are familiar with pandemic influenza roles and responsibilities.
- Assess and document the progress of both immunization and spread of disease throughout the local population.

- Recommend or develop training and procedures for healthcare sector employees.
- Provide the public with information about symptoms to watch for, how to limit
  interactions with ill persons, infection control precautions, and how to provide
  care of the ill at home in accordance with Federal guidelines.
- Monitor bulletins and other pandemic information from DHMH, Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) sources, especially to detect alerts about new virus variants and for changes in current recommendations for prevention and control of pandemic influenza.
- Coordinate pandemic influenza planning and response activities with DHMH and local planning, training, and response efforts.
- Coordinate with local government and private sector partners to develop emergency communication protocols with various types of media, private industry, academic, and nonprofit organizations.
- Keep healthcare systems and other partners and stakeholders informed of the status of the pandemic.
- Select and train a primary public spokesperson during a pandemic.
- Work with DHMH to establish plans to coordinate state, local, and federal public messages and ensure they are consistent and timely.
- As needed, monitor visitors from pandemic affected areas and quarantine.
- Provide assistance to local officials to ensure the safety of food and water for human consumption during, and immediately following, a pandemic outbreak.

#### **Howard County Office of Emergency Management (OEM) Shall:**

- Open, staff, and operate the local EOC during pandemic response.
- Coordinate activities related to the emergency support functions (ESFs) outside of ESF 8.
- Work with local partners (Community Emergency Response Network (CERN), Citizen Services, Red Cross, local business leaders) to develop plans that assure that during a pandemic:
  - Non-medical provisions can be delivered to the public as necessary
  - Local businesses, government and non-government organizations implement their COOP.
  - Community cooperation is fostered through such initiatives as the Neighbor2Neighbor program and other efforts to increase community interdependence.

#### **Howard County Department of Fire and Rescue (HCFR) Shall:**

- Provide staff for the Howard County Office of Emergency Management.
- Actively participate in the Howard County Health and Medical Resource Group.
- Provide input into ongoing pandemic influenza planning efforts of the Howard County Health Department.

- Provide emergency medical transportation and life support services throughout the pandemic.
- Staff alternative treatment centers (mass clinics) when necessary and personnel are available.
- Serve as alternate vaccinators in vaccination clinics when necessary and personnel are available.

#### **Howard County Police Department (HCPD) Shall:**

- Enforce social distancing orders in public places and at public events when necessary.
- Provide security forces and traffic control at SNS receipt and staging site(s) and police escort when transporting critical SNS supplies.
- Provide security and traffic control forces at vaccine/medication clinics when needed.

#### **Howard County Department of Citizen Services (DCS) Shall:**

- Work with community partners to create social support plans to be implemented during a pandemic.
- Coordinate community support efforts under the direction of the Office of Emergency Management.
- Develop plans in conjunction with the Red Cross, Community Emergency Response Network, and others to deliver needed non-medical provisions during a pandemic and to implement these plans when a pandemic strikes.
- Coordinate the recruitment of volunteers prior to a pandemic.
- Direct the Volunteer Center Serving Howard County to provide volunteers needed during pandemic response.
- Work with the Howard County Government, Office of Public Information to train and provide hotline volunteers.

#### **Howard County Department of Public Works (DPW) Shall:**

- Provide access to DPW facilities used for pandemic response.
- Coordinate for the delivery and operation/use of DPW equipment needed during a pandemic.
- Provide trucks/vehicles for the transportation of supplies, including those from the SNS receipt and staging site(s).
- Provide staffing to operate DPW equipment and vehicles as well as warehouse staff to help operate the SNS receipt and staging site(s).
- Cross-train and assign staff to ensure ongoing operations of critical county utilities and facilities
- Work with the Howard County Health Department and DHMH to implement the state plan for fatality management.
- Provide staff, equipment, and vehicles needed to operate a mass fatality management system, if necessary.

#### **Howard County Public School System (HCPSS) Shall:**

- Develop a comprehensive pandemic influenza response plan that provides for ongoing education during a pandemic, particularly if schools are closed for an extended period of time.
- Work with the Health Department to develop a protocol for deciding if and when schools should be closed during a pandemic and whether this closure will occur in a specific school or schools or take place system-wide.
- Educate students, parents, and staff about proper cough hygiene and hand washing as tools to help prevent the spread of influenza.
- Provide school buildings and facilities when needed for pandemic response, including facilities to operate mass vaccination and medication clinics.

#### **Howard County Department of Corrections (DoC) Shall:**

- Provide DoC facilities for pandemic response, including potential sites for SNS receipt and staging.
- Provide personnel to staff DoC facilities being used as SNS receipt and staging site(s) when needed for pandemic response.
- Develop a comprehensive pandemic influenza response plan that helps limit the spread of influenza through the inmate population and increases the capacity to provide medical care for large numbers of inmates during a pandemic.

#### **Howard County Government**

#### County Administration shall:

- Facilitate ordering and procurement of needed supplies and services during pandemic response.
- Develop a system for tracking and facilitating cost reimbursement while working with state and federal partners.
- Work with the Office of Law to assure that local statutes and regulations promote rapid and effective pandemic response.
- Re-assign employees to job duties necessary to assist in the pandemic response

#### The Office of Public Information shall:

- Coordinate public information efforts during a pandemic in conjunction with the Howard County Health Department Public Information Officer.
- Train and coordinate hotline volunteers in conjunction with Department of Citizen Services.

#### **Howard County Department of Technology and Communication Services Shall:**

 Provide information technology equipment and resources needed, including technical support, during pandemic response.

#### **Howard County Department of Recreation and Parks Shall:**

 Coordinate the movement of people/pets as well as the movement of cargo during a pandemic response.

#### **Howard County Mental Health Authority Shall:**

- Coordinate the provision of mental health services and counseling needed for personnel involved in pandemic response.
- Serve as a resource to the public in addressing mental health needs to include activation of the Mental Health Disaster Response Team, as indicated.

#### **Proposed Additional Roles for DHMH:**

In addition to the DHMH roles and responsibilities outlined in the Maryland Pandemic Influenza Plan, the Howard County Health Department will be seeking concrete guidance from DHMH in the following areas both prior to and during a pandemic:

- Guidance on planning for alternate treatment centers in medium sized jurisdictions that have a sizeable population (>250,000) yet only one hospital (such as Howard County).
- Recommendations for personal protective equipment for medical care providers, first responders, public health personnel, and the general public.
- Recommendations for the use and implementation of isolation and quarantine methods, their value in pandemic response, and timing of their use during an influenza pandemic.
- Guidance and a detailed state-wide plan for mass fatality management that outlines expectations of local public health/medical examiners.
- Assistance with streamlining cost reimbursement through DHMH budgetary systems.

#### ROLES AND RESPONSIBILITIES OF NON-GOVERNMENT ORGANIZATIONS

The following non-government organizations will play key roles in both planning for and responding to an influenza pandemic:

- Howard County General Hospital/Health Care Facilities
- American Red Cross

- Community Emergency Response Network (CERN)
- Medical Reserve Corps (MRC).
- Faith-based and Community-based Organizations
- Private-sector Organizations and Businesses

In addition to specific tasks assigned to combat an influenza pandemic in Howard County, many of the tasks are recommended by the Pandemic Influenza Implementation Plan for the National Strategy. This is particularly the case for faith-based/community-based organizations and for private-sector organizations and businesses.

#### **Howard County General Hospital/Health Care Facilities Shall:**

- Develop a plan for response to an influenza pandemic. This plan should be developed by an interdisciplinary team and it should be well integrated and coordinated with the facility's plan to address smallpox and other communicable diseases. The elements of a hospital influenza plan are listed in the Hospital Preparedness checklist.
- Develop an internal and external communication plan. The infrastructure for communication should follow the Incident Command System.
- Develop an education and training plan that addresses the needs of staff, patients, family members, and visitors.
- Ensure protection of healthy workers from exposures in the healthcare setting through the use of recommended infection control measures; appropriate evaluation management of symptomatic and ill healthcare personnel; distribution and administration of antiviral drugs and/or vaccines to healthcare personnel, as recommended by HHS and DHMH; and provision of psychosocial services to health care workers and their families to help sustain the workforce.
- Establish systems to effectively screen workers for respiratory symptoms; reinforce proper use of PPE, hand hygiene and other infection control measures; review time-off policies and have a plan for reassignment of high-risk personnel (e.g., pregnant women, immuno-compromised staff) to low risk duties; promote annual influenza vaccination; and develop a plan to rapidly administer vaccine and antivirals should they become available.
- Determine in advance what criteria and procedures they will use to limit nonpatient access to the facility if pandemic influenza spreads through the community. Any variation from normal health care access should be communicated to patients, staff and visitors.
- Develop criteria or thresholds for temporary closure of the hospital to new admissions and transfers. The criteria should consider staffing ratios, isolation capacity, and risks to non-influenza patients.
- Develop a plan for security including assessment of building for security/access risks; a defined method of identification of staff and visitors; and enforcement of access by healthcare security services. Local law enforcement should be informed of the plan, however; they might be overburdened during a pandemic

- and therefore will have limited ability to assist healthcare facilities with security services.
- Develop efficient systems to: 1) identify patients with pandemic influenza versus the worried well; 2) physically separate suspect influenza patients from other patients during waiting and triage to reduce risk of disease transmission; and 3) determine whether hospitalization is required.
- Develop plans to enhance their capacity to triage. These can be on-campus (e.g., additional outpatient clinics, temporary shelters) or off-campus at extension clinic sites.
- Address emergency staffing needs and increased demand for isolation, ICUs, beds, assisted ventilation services and consumable and durable medical supplies.
- Address how essential medical services will be maintained for persons with chronic medical problems served by the healthcare facility (e.g., hemodialysis patients, drug infusion therapy).

#### **American Red Cross of Central Maryland Shall:**

- Work with the Howard County Department of Citizen Services and the Community Emergency Response Network to plan community support activities.
- Take part in implementing community support activities, including the delivery and dispersal of non-medical provisions to county residents during a pandemic.
- Participate in the planning for and activation of alternate treatment centers during a pandemic.
- Provide volunteers and help coordinate volunteer activity under the direction of the Department of Citizen Services.

#### **Community Emergency Response Network (CERN) Shall:**

- Support the Medical Reserve Corps through the Horizon Foundation in partnership with the Office of Emergency Management.
- Act as a community-based resource for the planning and implementation of community support programs during a pandemic, including provision of nonmedical provisions, COOP plans for local businesses and community organizations, community cooperation initiatives, such as the Horizon-sponsored Neighbor2Neighbor program, and recruitment of community volunteers.

#### **Medical Reserve Corps Shall:**

- Recruit and maintain an organization of local, county-based volunteers from the medical professions (doctors, nurses, allied health) who can respond to emergencies in the county.
- Coordinate local Medical Reserve Corps within the greater, state-wide Medical Professional Volunteer Corps system.
- Train local Corps volunteers in emergency response and provide a system for credentialing of volunteers.

 Activate and deploy volunteers when needs arise as directed by the local Health Officer.

## Faith-Based Organizations (FBOs) and Community Based Organizations (CBOs) shall:

- Assign key staff with the authority to develop, maintain, and act upon an influenza pandemic preparedness and response plan.
- Determine the potential impact of a pandemic on your organization's usual activities and services. Plan for situations likely to require increasing, decreasing, or altering the services your organization delivers.
- Determine the potential impact of a pandemic on outside resources that your organization depends on to deliver its services (e.g., supplies, travel).
- Outline what the organizational structure will be during an emergency and revise periodically. The outline should identify key contacts with multiple back-ups, roles and responsibilities, and who is to report to whom.
- Identify and train essential staff (including full-time, part-time, and unpaid or volunteer staff) needed to carry on your organization's work during a pandemic.
   Include back up plans, cross-train staff in other jobs so that if staff are sick, others are ready to come in to carry on the work.
- Test your response and preparedness plan using an exercise or drill, and review and revise your plan as needed.
- Communicate with and educate your staff, members, and persons in the community that you serve.
- Find up-to-date, reliable pandemic information and other public health advisories from State and local health departments, emergency management agencies, and HHS. Make this information available to your organization and others.
- Distribute materials with basic information about pandemic influenza: signs and symptoms, how it is spread, ways to protect yourself and your family (e.g., respiratory hygiene and cough etiquette), family preparedness plans, and how to care for ill persons at home.
- When appropriate, include basic information about pandemic influenza in public meetings (e.g., sermons, classes, trainings, small group meetings, announcements).
- Share information about your pandemic preparedness and response plan with staff members, and persons in the communities that you serve.
- Develop tools to communicate to staff, members, and persons in the communities that you serve information about pandemic status and your organization's actions. This might include websites, flyers, local newspaper announcements, pre-recorded widely distributed phone messages, etc.
- Consider your organization's unique contribution to addressing rumors, misinformation, fear, and anxiety.

- Advise staff, members, and persons in the communities you serve to follow information provided by public health authorities -- State and local health departments, emergency management agencies, and HHS.
- Ensure that what you communicate is appropriate for the cultures, languages, and reading levels of your staff, members, and persons in the communities that you serve.
- Plan for the impact of a pandemic on your staff, members, and the communities that you serve.
- Plan for staff absences during a pandemic due to personal and/or family illnesses, quarantines, and school, business, and public transportation closures. Staff may include full-time, part-time, and volunteer personnel.
- Work with local health authorities to encourage yearly influenza vaccination for staff members, and persons in the communities that you serve.
- Evaluate access to mental health and social services during a pandemic for your staff members, and persons in the communities that you serve; improve access to these services as needed.
- Identify persons with special needs (e.g., elderly, disabled, limited English speakers) and be sure to include their needs in your response and preparedness plan. Establish relationships with them in advance so they will expect and trust your presence during a crisis.
- Set up policies for non-penalized leave for personal illness or care for sick family members during a pandemic.
- Set up mandatory sick-leave policies for staff suspected to be ill, or who become ill at the worksite. Employees should remain at home until their symptoms resolve and they are physically ready to return to duty.
- Set up policies for flexible work hours and working from home.
- Evaluate your organization's usual activities and services (including rites and religious practices if applicable) to identify those that may facilitate virus spread from person to person. Set up policies to modify these activities to prevent the spread of pandemic influenza (e.g., guidance for respiratory hygiene and cough etiquette, and instructions for persons with influenza symptoms to stay home and phone the organization rather than visit in person).
- Follow State and HHS travel recommendations during an influenza pandemic.
  Recommendations may include restricting travel to affected domestic and
  international sites, recalling non-essential staff working in or near an affected site
  when an outbreak begins, and distributing health information to persons who are
  returning from affected areas.
- Set procedures for activating your organization's response plan when an influenza pandemic is declared by public health authorities and altering your organization's operations accordingly.
- Allocate resources to protect your staff, members, and persons in the communities that you serve during a pandemic.
- Determine the amount of supplies needed to promote respiratory hygiene and cough etiquette and how they will be obtained.
- Consider focusing your organization's efforts during a pandemic on providing services that are most needed during the emergency (e.g., mental/spiritual health

- or social services). Coordinate with external organizations and help your community.
- Understand the roles of Federal, State, and local public health agencies and emergency responders and what to expect and what not to expect from each in the event of a pandemic.
- Work with local and/or State public health agencies, emergency responders, local health care facilities, and insurers to understand their plans and what they can provide, share your preparedness and response plan and what your organization is able to contribute, and take part in their planning. Assign a point of contact to maximize communication between your organization and your State and local public health systems.
- Coordinate with emergency responders and local health care facilities to improve availability of medical advice and timely/urgent health care services for your staff, members, and persons in the communities that you serve.
- Share what you have learned from developing your preparedness and response plan with other FBOs and CBOs to improve community response efforts.
- Work together with other FBOs and CBOs in your local area and through networks (e.g., denominations, associations) to help your communities prepare for pandemic influenza.

#### **Private-sector Organizations and Businesses shall:**

- Identify a pandemic influenza coordinator and/or team with defined roles and responsibilities for preparedness and response planning. The planning process should include input from labor representatives.
- Identify essential employees and other critical inputs (e.g., raw materials, suppliers, sub-contractor services/products, and logistics) required to maintain business operations by location and function during a pandemic.
- Train and prepare ancillary workforce (e.g., contractors, employees in other job titles/descriptions, retirees).
- Develop and plan for scenarios likely to result in an increase or decrease in demand for your products and/or services during a pandemic (e.g., effect of restrictions on mass gatherings, need for hygiene supplies).
- Determine potential impact of a pandemic on organization or business financials using multiple possible scenarios that affect different product lines and/or production sites.
- Determine potential impact of a pandemic on organization-related domestic and international travel (e.g., quarantine, border closures).
- Find up-to-date reliable pandemic information from community public health, emergency management, and other sources and make sustainable links.
- Establish an emergency communications plan and revise periodically. This plan includes identification of key contacts (with back-ups), chain of communications (including suppliers and customers), and processes for tracking and communicating business and employee status.
- Implement and exercise/drill to test your plan and revise periodically.

- Forecast and allow for employee absence during a pandemic due to factors such as personal illness, family member illness, community containment measures and quarantines, school and/or business closures, and public transportation closures.
- Implement guidelines to modify frequency and type of face-to-face contact (e.g., hand-shaking, seating in meetings, office layout, shared workstation) among employees and between employees and customers.
- Encourage and track annual influenza vaccination for employees during regular influenza seasons.
- Evaluate employee access and availability to health care services during a pandemic, and improve services as needed.
- Evaluate and improve access to and availability to mental health and social services during a pandemic, including corporate, community, and faith-based resources, and improve services as needed.
- Identify employees and key customers with special needs, and incorporate the requirements of such person into your preparedness plan.
- Establish policies for employee compensation and sick leave absences unique to a pandemic (e.g., non-punitive, liberal leave), including policies on when a previously ill person is no longer infectious and can return to work after illness.
- Establish policies for flexible worksite (e.g., telecommuting) and flexible work hours (e.g., staggering shifts).
- Establish policies for preventing influenza spread at the worksite (e.g., promoting respiratory hygiene/cough etiquette, increasing social distancing among employees and between employees and customers, and prompt exclusion of people with influenza symptoms).
- Establish policies for personnel who have been exposed to pandemic influenza, are suspected to be ill, or become ill at the worksite (e.g., infection control response, immediate mandatory sick leave).
- Establish policies for restricting travel to affected geographic areas (consider both domestic and international sites) and for evacuating employees working in or near an affected area when an outbreak begins, and establish guidance for employees returning from affected areas.
- Set up authorities, triggers, and procedures for activating and terminating the
  organization's response plan, altering business operations (e.g., shutting down
  operations in affected areas), and transferring business knowledge to key
  employees.
- Provide sufficient and available infection control supplies. The deployment of
  infection control measures requires the ready availability of soap and water, hand
  sanitizer, tissues and waste receptacles, environmental cleaning supplies, for the
  duration of a pandemic.
- Enhance communications and information technology infrastructure as needed to support employee telecommuting and remote customer access.
- Ensure availability of medical consultation and advice for emergency response.
- Develop and disseminate programs and materials covering pandemic fundamentals (e.g., signs and symptoms of influenza, modes of transmission),

- personal and family protection, and response strategies (e.g., hand hygiene, cough/sneeze etiquette, contingency plans).
- Anticipate employee fear and anxiety, rumors, and misinformation and plan communications accordingly.
- Ensure communications are culturally and linguistically appropriate.
- Disseminate information to employees about the organizational pandemic preparedness plan.
- Provide information for the at-home care of ill employees and family members.
- Develop platforms (e.g., hotlines, dedicated websites) for communicating pandemic status and actions to employees, vendors, suppliers, and customers inside and outside the worksite in a consistent and timely way, including redundancies in the emergency contact system.
- Identify community sources for timely and accurate pandemic information (domestic and international) and resources for obtaining countermeasures (e.g., vaccines and antiviral medications).
- Collaborate with insurers, health plans, and major health care facilities to share your pandemic plans and understand their capabilities and plans.
- Collaborate with Federal, State, and local public health agencies and/or emergency responders to participate in their planning processes, share your pandemic plans, and understand their capabilities and plans.
- Communicate with local and/or State public health agencies and/or emergency responders about the assets and/or services your business could contribute to the community.
- Share best practices with other businesses in your community, chambers of commerce, and associations to improve community response efforts.

#### ADDITIONAL PLANNING CHECKLISTS

The Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) have developed the following checklists. These lists identify important activities for planning and response to pandemic influenza. Many of the activities are applicable to other public health emergencies. The checklists are available at: <a href="http://www.pandemicflu.gov/plan/checklists.html">http://www.pandemicflu.gov/plan/checklists.html</a>.

#### **State & Local Government**

State and Local Pandemic Influenza Planning Checklist

#### **Business**

Business Pandemic Influenza Planning Checklist Letter to Business Leaders from Secretaries Chertoff, Leavitt, and Gutierrez

#### **Individuals & Families**

Pandemic Flu Planning Checklist for Individuals and Families Family Emergency Health Information Sheet

#### Schools

Child Care and Preschool Pandemic Influenza Planning Checklist School District (K-12) Pandemic Influenza Planning Checklist Colleges and Universities Pandemic Influenza Planning Checklist

#### **Health Care**

Home Health Care Services Pandemic Influenza Planning Checklist
Medical Offices and Clinics Checklist
Emergency Medical Service and Medical Transport Checklist
Hospital Preparedness Checklist
Long-Term Care and Other Residential Facilities Pandemic Influenza Planning
Checklist

#### **Community Organizations**

Faith-Based and Community Organizations Pandemic Influenza Preparedness Checklist

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